Listing of claims:

1. (Currently Amended) An apparatus for setting a transmission-rate parameter for transmission of symbols in a wireless communication system, comprising:

[-] a total counter for counting a total number of received information units;

[-] an error counter for counting an error number of received invalid received information units;

[-] a division unit for dividing said error number by said total number, the division result being providable as a link-quality measure at an output of said division unit, characterized in that said division unit is adapted to automatically perform binary divisions by 2 using a shift operation after n symbols are received, where n is some integral power of 2; and

[-] a decision unit for ~~automatically~~ setting said transmission-rate parameter by comparing said link-quality measure with at least one predefined value and defining said transmission-rate parameter to assume a corresponding data rate.

2. (Previously presented) Apparatus according to claim 1, wherein the link-quality measure or the transmission-rate parameter is sequentially updatable.

3. (Previously presented) An apparatus for setting a transmission-rate parameter for transmission of information units in a wireless communication system, comprising:
- a total counter for counting a total number of received information units;
- an error counter for counting an error number of received invalid information units;
- a division unit for dividing said error number by said total number, the division result being providable as a link-quality measure at an output of said division unit;and
- a decision unit for setting said transmission-rate parameter by comparing said link-quality measure with at least one predefined value and defining said transmission-rate parameter to assume a corresponding data rate,
wherein the link-quality measure is derivable iteratively increasing said total number after $2^n * f$ counted information units, with n = 0, 1,2, ... and f a defined factor.

4. (Previously presented) Apparatus according to claim 3, wherein the division is executable at a multiple of factor f automatically by a shift operation corresponding to n.

5. (Previously presented) Apparatus according to claim 1, wherein the error number is maintained between at least two subsequent updates of the link-quality measure.

6. (Previously presented) An apparatus for setting a transmission-rate parameter for transmission of information units in a wireless communication system, comprising:
- a total counter for counting a total number of received information units;

- an error counter for counting an error number of received invalid information units;
- a division unit for dividing said error number by said total number, the division result being providable as a link-quality measure at an output of said division unit;and
- a decision unit for setting said transmission-rate parameter by comparing said link-quality measure with at least one predefined value and defining said transmission-rate parameter to assume a corresponding data rate,
wherein the division unit comprises storage cells having a shift control, or comprises a multiplexer having a static logic.

7. (Previously presented) Apparatus of claim 1 further comprising a control unit which controls the total counter, the error counter, the division unit, and the decision unit.

8. (Previously presented) Apparatus according to claim 1, wherein the division unit comprises the error counter.

9. (Previously presented) Apparatus according to claim 1, wherein the decision unit comprises at least one comparator and a derivation unit for deriving from at least one output of said comparator the transmission-rate parameter.

10. (Previously presented) Apparatus according to claim 1, wherein at least four predefined values are preloadable thresholds which correspond to a data rate of 4, 2, 1, 0.5 or 0.25 Mb/s, respectively.

11. (Previously presented) An adaptive variable data-rate system for transmitting data over an infrared link comprising an apparatus according to claim 1.

12. (Previously presented) A method for setting a transmission-rate parameter for transmission of information units in a wireless communication system, comprising the steps of:
- counting a total number of received information units;
- counting an error number of received invalid information units;
- dividing said error number by said total number and providing the division result as a link-quality measure;
- comparing said link-quality measure with at least one predefined value; and
- automatically setting said transmission-rate parameter depending on the result of the comparison.

13. (Previously presented) Method according to claim 12, wherein the link-quality measure or the transmission-rate parameter is sequentially updated.

14. (Previously presented) A method for setting a transmission-rate parameter for transmission of information units in a wireless communication system, comprising the steps of:
- counting a total number of received information units;
- counting an error number of received invalid information units;
- dividing said error number by said total number and providing the division result as a link-quality measure;

- comparing said link-quality measure with at least one predefined value; and
- setting said transmission-rate parameter depending on the result of the comparison, wherein the link-quality measure is derived after receiving a number of information units that is a multiple of 2^n, with n = 0,1,2, ...

15. (Previously presented) Method according to claim 12, wherein the information units are encoded by Pulse Position Modulation.

16. (Previously presented) Method according to claim 12, wherein with the setting of the transmission-rate parameter, a data rate of information units is adapted to the link-quality measure.

17. (Previously presented) Method according to claim 15 wherein the data rate depends on a repetition of information units.

18. (Previously presented) Method according to claim 12, being carried out by means of a computer program.

19. (Previously presented) Computer readable program code means for causing a computer to effect a determination of a link-quality measure in order to set a transmission-rate parameter for transmission of information units in a wireless communication system, comprising the steps of:
- counting a total number of received information units;
- counting an error number of received invalid information units;

- dividing said error number by said total number and providing the division result as a link-quality measure;
- comparing said link-quality measure with at least one predefined value; and
- automatically setting said transmission-rate parameter depending on the result of the comparison.

20. (New) A method as recited in claim 1, wherein said decision unit automatically sets the said transmission rate parameter.